

## CLAIMS

We claim:

5           1. A power line phase coupler system, comprising:

          a length of power cord having a male connector electrically connected thereto,  
wherein said male connector is formed to electrically engage a multi-phase wall outlet  
having at least a Phase A, a Phase B and a neutral; and

          a repeater coupler electrically connected to said power cord opposite of said  
10 male connector, wherein said repeater coupler transmits high frequency  
communications between said Phase A and said Phase B.

          2. The power line phase coupler system of Claim 1, wherein said repeater  
15 coupler receives a transmitted high frequency communication from Phase A or Phase B,  
and wherein said repeater coupler transmits a repeated high frequency communication  
to another phase at an amplified level.

          20           3. The power line phase coupler system of Claim 2, wherein said repeater  
coupler includes an identifier tag within said repeated high frequency communication.

          4. The power line phase coupler system of Claim 3, wherein said repeater  
25 coupler does not repeat high frequency communications with said identifier tag.

          5. The power line phase coupler system of Claim 4, wherein said repeater  
coupler includes a housing having an interior cavity.

6. The power line phase coupler system of Claim 5, including a female connector positioned within said housing and electrically connected to said power cord,  
5 wherein said female connector is formed for receiving a multi-phase male connector for allowing multi-phase electrical power to pass from said multi-phase wall outlet to said multi-phase male connector.

10 7. The power line phase coupler system of Claim 6, wherein said male connector includes at least a first prong, a second prong and a third prong electrically connectable to said Phase A, said Phase B and said neutral of said multi-phase wall outlet.

15 8. The power line phase coupler system of Claim 7, wherein said female connector includes at least a first slot, a second slot and a third slot electrically connected to said first prong, said second prong and said third prong by said power cord.

20 9. The power line phase coupler system of Claim 8, wherein said power cord includes at least a first wire, a second wire and a third wire electrically connected respectively between said first prong and said first slot, said second prong and said  
25 second slot, and said third prong and said third slot, wherein said repeater coupler is electrically connected between said first wire and said second wire.

10. The power line phase coupler system of Claim 9, wherein said housing includes an interior cavity.

5 11. A power line phase coupler system, comprising:

a housing having a first side and a second side, wherein said first side of said housing includes a male connector, wherein said male connector is formed to electrically engage a multi-phase wall outlet having at least a Phase A, a Phase B and a neutral; and

10 a repeater coupler electrically connected to said male connector, wherein said repeater coupler transmits high frequency communications between said Phase A and said Phase B.

15 12. The power line phase coupler system of Claim 11, wherein said repeater coupler receives a transmitted high frequency communication from Phase A or Phase B, and wherein said repeater coupler transmits a repeated high frequency communication to another phase at an amplified level.

20 13. The power line phase coupler system of Claim 12, wherein said repeater coupler includes an identifier tag within said repeated high frequency communication.

25 14. The power line phase coupler system of Claim 13, wherein said repeater coupler does not repeat high frequency communications with said identifier tag.

15. The power line phase coupler system of Claim 14, including a female connector positioned within said housing and electrically connected to said power cord, wherein said female connector is formed for receiving a multi-phase male connector for allowing multi-phase electrical power to pass from said multi-phase wall outlet to said multi-phase male connector.

16. The power line phase coupler system of Claim 15, wherein said male connector includes at least a first prong, a second prong and a third prong electrically connectable to said Phase A, said Phase B and said neutral of said multi-phase wall outlet.

17. The power line phase coupler system of Claim 16, wherein said female connector includes at least a first slot, a second slot and a third slot electrically connected to said first prong, said second prong and said third prong by said power cord.

18. The power line phase coupler system of Claim 17, including a first wire, a second wire and a third wire electrically connected respectively between said first prong and said first slot, said second prong and said second slot, and said third prong and said third slot, wherein said repeater coupler is electrically connected between said first wire and said second wire.

19. The power line phase coupler system of Claim 18, wherein said housing is tubular shaped with said first side and second side on opposing sides of said housing.

20. The power line phase coupler system of Claim 18, wherein said housing is a flat structure with said first side and second side on opposing sides of said housing.